

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF WEST VIRGINIA**

ELECTRONICALLY
FILED
08/23/2021
U.S. DISTRICT COURT
Northern District of WV

WEST VIRGINIA UNIVERSITY BOARD
OF GOVERNORS,

and

WEST VIRGINIA UNIVERSITY
RESEARCH CORPORATION,

Plaintiffs,

V.

PLASMA IGNITER, LLC,

Defendant.

No. **1:21-CV-116**

Judge **Kleeh**

COMPLAINT FOR DECLARATORY RELIEF, SPECIFIC PERFORMANCE, AND DAMAGES

JURY TRIAL DEMANDED

Plaintiffs West Virginia University Board of Governors on behalf of West Virginia University (“**WVU**”) and West Virginia University Research Corporation (“**WVURC**”), by and through their undersigned counsel, state as follows for their Complaint against Defendant Plasma Igniter, LLC (“**PI**”):

INTRODUCTION

1. Pursuant to university policies, WVU owns all intellectual property created by its faculty, staff, students, employees, and others using WVU's resources or within their scope of employment or duties to WVU.

2. Plaintiff WVURC was created to support research at WVU, and provide evaluation, development, patenting, management, and marketing services for inventions of the faculty, staff and students of WVU. WVURC brings this action for declaratory relief, specific performance, and damages in order to obtain proper title and interest in its intellectual and personal property related to groundbreaking research involving novel ignition sources. WVURC is delegated the

responsibility of managing the transfer, licensing, ownership, and commercialization efforts of intellectual property owned by WVU as the university's agent.

3. In 2013, WVURC granted Defendant PI's predecessor an exclusive license to commercially exploit certain patents owned by WVU related to novel ignition sources; later that year these rights were assigned to PI. As partial consideration for the license grant, the licensee was obligated to fund WVU's further development of the novel ignition sources, and improvements so developed and derivative intellectual property would be owned by WVU.

4. As a result, WVURC undertook to ensure that all developments of the original novel ignition source patents were exclusively licensed to PI. However, PI did not fulfill its obligation to ensure that the patent and patent applications from these subsequent developments were patented in WVU's name. This failure continues to harm WVU's and WVURC's business interests, including its ability to prosecute the pending applications and otherwise manage the patent portfolio and evidence clear title, resulting in financial losses to WVURC and WVU.

5. Further, without the consent or authorization of WVU or WVURC, PI wrongfully retains possession of certain personal property and confidential information of WVU and WVURC, resulting in additional financial losses to WVURC and WVU.

6. Plaintiffs WVU and WVURC bring this action for declaratory relief, specific performance, and damages in order to obtain proper title and interest in its intellectual and personal property related to or involving novel ignition sources.

PARTIES, JURISDICTION, AND VENUE

7. Plaintiff WVU is a state agency of West Virginia with an address at 105 Stewart Hall, Morgantown, West Virginia 26506.

8. Plaintiff WVURC is a West Virginia non-profit corporation with an address at 886 Chestnut Ridge Road, Morgantown, West Virginia 26506.

9. Upon information and belief, Defendant PI is an Ohio Limited Liability Company with an address at 2425 W. 11th Street, Cleveland, Ohio 44113.

10. This action arises under the Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202. This action also arises under West Virginia common law.

11. This Court has subject matter jurisdiction over this dispute pursuant to 28 U.S.C. § 1332, and the Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202 because this action involves an actual controversy between citizens of different states regarding the ownership of certain patents, the value of which exceeds \$75,000.

12. This Court has personal jurisdiction over PI pursuant to W.Va. Code § 56-3-33 and the laws of the United States because PI has transacted business in this District and pursuant to the forum selection clauses in the agreements between the parties outlined herein.

13. Venue lies in this district pursuant to 28 U.S.C. §§ 1391(b) because a substantial part of the events or omissions giving rise to the claims and the damages resulting therefrom occurred in this District and pursuant to the forum selection clauses in the agreements between the parties outlined herein.

FACTUAL BACKGROUND

14. Since at least as early as 1992, WVU has been researching and developing ignition sources that generate a plasma using radio frequency power, which ignition sources are particularly useful in internal combustion engines (with improvements over time, generally referred to as the “**Technology**”). The research and development into such ignition sources significantly improve engine fuel economy by providing consistent and smooth combustion at lean air/fuel ratios.

15. This Technology was first described in U.S. Patent Application Serial No. 07/954,445 (the “**445 Application**”), filed on September 30, 1992, naming Dr. James (“Jim”) Smith and Dr. Frantz Pertl as inventors; prior to the abandonment of this application, U.S. Patent

Application Serial No. 08/164,660 was filed claiming priority to the ‘445 Application, which issued as U.S. Patent No. 5,361,737 (the “**737 Patent**”). Subsequent inventions of Dr. Smith and Dr. Pertl were described in related patents issued by the U.S. Patent and Trademark Office, including U.S. Patent No. 7,721,697 (the “**697 Patent**”), and others.

16. At all times relevant to this Complaint and his contributions to the conception and development of the Technology, inventor Dr. James Smith was a Professor in the Department of Engineering at WVU. A copy of WVU’s Notification of Appointment for Dr. Smith for 2017 to 2018, which also reflects his 36-year employment with WVU, is attached hereto as Exhibit 1.

17. At all times relevant to this Complaint and his contributions to the conception and development of the Technology, and specifically from 1999 through 2011, Dr. Franz Pertl was a Research Associate and Program Coordinator in the Department of Engineering at WVU.

18. As a result of their employment and positions with WVU, Dr. Smith and Dr. Pertl agreed to abide by and were governed by WVU’s Intellectual Property Policy (the “**WVU IP Policy**” attached hereto as Exhibit 2), which provides that WVU “**retain[s] all rights, title, and interest in any and all intellectual property generated, created, or developed in facilities operated or controlled by [WVU], supported by funds administered by [WVU] or performed in the course of regular employment or duties by Creator(s) unless exempted by other provisions of this Policy.**” Ex. 2, WVU IP Policy at 1 (emphasis added). The policy further provides that “**Creator(s) shall assign rights in Applicable Intellectual Property to [WVU]. All assignments must be in writing and conform to the requirements of this Policy. The failure of Creator(s) to agree in writing to assign Applicable Intellectual Property rights to the University shall in no way constitute a waiver of the University’s rights to the Applicable Intellectual Property as set forth herein.**” Ex. 2, WVU IP Policy at 2 (emphasis added).

19. The WVU IP Policy defines “Creator” as: “any faculty, staff, other employee of the University or any person, including students, who creates or discovers Applicable Intellectual Property using University Resources or within the scope of the Creator’s employment with the University.” Ex. 2, WVU IP Policy at 1.

20. The WVU IP Policy defines “Applicable Intellectual Property” as: “any creation, discovery, improvement, innovation, invention, or product resulting therefrom, developed with University Resources or within the scope of the Creator’s employment or duties to the University. Applicable Intellectual Property includes, but is not limited to, patents, copyrights, trademarks, and trade secrets.” Ex. 2, WVU IP Policy at 1.

21. The WVU IP Policy defines “University Resources” as: all tangible resources provided by the University to Creator(s), including but not limited to office, lab, and studio space; computer hardware, software and support; secretarial service; research, teaching, lab assistants; supplies; utilities; funding for research and teaching activities, travel; and other funding or reimbursement.” Ex. 2, WVU IP Policy at 1.

22. During their time with WVU and in their conception and development of inventions of the Technology, both Dr. Smith and Dr. Pertl were Creators under the WVU IP Policy, creating, discovering, improving, innovating and inventing Applicable Intellectual Property with University Resources.

23. Effective February 25, 2013, WVURC and Advanced Technology Applications, LLC (“**ATA**”) entered into a license agreement wherein WVURC granted ATA the exclusive right to develop, make, and sell products covered by certain patents owned by WVU, namely the ’737 Patent (now expired) and the ’697 Patent, among other rights (the “**2013 License**,” attached hereto as Exhibit 3).

24. In particular, the '697 Patent describes an apparatus and method for igniting combustible materials in a combustion chamber of a combustion engine using corona discharge plasma from a coaxial cavity resonator, which can function as a replacement for a spark plug in an internal combustion engine.

25. As partial consideration for the license of the Technology, WVURC was granted a minority ownership interest in ATA.

26. Pursuant to the 2013 License, ATA agreed to pay WVURC an aggregate of at least Three Hundred and Fifty Thousand Dollars (\$350,000.00) to sponsor additional research and development of the Technology licensed to ATA under the 2013 License. Ex. 3, 2013 License § 5.1.

27. The 2013 License also provided that “Confidential Information and all embodiments and expressions of such Confidential Information, including, without limitation, all reports, notes, reprints, descriptions, copies and summaries thereof, shall be and remain the property of the disclosing party at all times, and shall be returned to the disclosing party upon request.” Ex. 3, 2013 License § 6.3.

28. “Confidential Information is defined [in the 2013 License] to mean ‘trade secrets, know-how and other confidential information...(including, without limitation, technical, business and market information, patent disclosures, patent applications, structures, models, techniques, formula, processes, compositions, compounds, cell lines, apparatus, designs, sketches, photographs, plans, drawings, specifications, samples, reports, customer lists, price lists, studies, findings, inventions and ideas) disclosed by the other party.’” Ex. 3, 2013 License § 6.1.

29. The parties likewise agreed to keep “all Confidential Information in strictest confidence” and not to “directly or indirectly disclose any Confidential Information, other than to

employees or agents...who reasonably require knowledge of such Confidential Information to accomplish the disclosure of the Confidential Information.” Ex. 3, 2013 License § 6.2.

30. On August 7, 2013, ATA entered into an Assignment of Rights Under Exclusive License Agreement with PI, wherein PI agreed to “fulfill all obligations of ATA as Licensee under, and abide [sic] all terms of, the [2013 License]” (the “**2013 Assignment**,” attached hereto as Exhibit 4).

31. At the time of the 2013 Assignment and until 2019, Jim Smith was the Manager of PI.

32. Following Dr. Pertl’s departure from WVU, Andrew Lowery and Michael Spencer joined Jim Smith in further developing the innovation of the Technology, as for example reflected in WVURC Invention Disclosures #641, #642 and #658. Copies of Invention Disclosures #641, #642, and #658 are collectively attached hereto as Exhibit 5.

33. At all times relevant to this Complaint and his contributions to the conception and development of the Technology, inventor Michael Spencer was a graduate student and a Research Associate in the Department of Engineering at WVU.

34. At all times relevant to this Complaint and his contributions to the conception and development of the Technology, and specifically from August 2006 through October 2019, inventor Dr. Andrew D. Lowery was affiliated with the University as a Graduate Assistant and Graduate Teaching Assistant, a Program Assistant, and a Visiting Scholar, working in various departments of the University, finally being appointed as an Adjunct Professor in the Department of Mechanical and Aerospace Engineering at WVU. A copy of Dr. Lowery’s courtesy appointment letter, which outlines Dr. Lowery’s appointment from October 1, 2016 to September 30, 2019, is attached hereto as Exhibit 6.

35. As with Dr. Smith and Dr. Pertl, as a result of their positions with WVU, Mr. Spencer and Dr. Lowery also agreed to abide by and were governed by the WVU IP Policy.

36. During their time with WVU and in their conception and development of inventions of the Technology, both Mr. Spencer and Dr. Lowery were Creators under the WVU IP Policy, creating, discovering, improving, innovating and inventing Applicable Intellectual Property (resulting in Technology) with University Resources.

37. On February 27, 2014, ATA and WVURC amended the 2013 License to include the further developments of the Technology by WVU, as described in Invention Disclosures #641, #642, and #658, such that pursuant to the 2013 Assignment PI retained an exclusive license for the Technology, namely the '697 Patent and the Invention Disclosures (the **"2014 License Amendment"**), attached hereto as Exhibit 7.

38. In the three years following the execution of the 2014 License Amendment, a number of patent applications were filed on the further developments of the Technology, naming WVU as the Assignee and in some applications naming WVU as the Applicant. However, during that same period certain patent applications on the further developments of the Technology were filed with the U.S. Patent & Trademark Office (**"USPTO"**), the World Intellectual Property Office (**"WIPO"**), and other foreign patent offices, naming PI as the Applicant without WVU's consent and contrary to the terms of the 2013 License and the course of dealing thereunder. (See attached Licensed Technology Exhibit (Exhibit 8). In the case of applications filed with WIPO and at foreign patent offices, and contrary to the parties' intentions, the named applicant is the presumed assignee.

39. In furtherance of WVU's ongoing research efforts relating to the Technology licensed exclusively to PI, on March 1, 2017, WVURC and PI entered into a Fixed Price

Agreement (the “**2017 FPA**”), attached hereto as Exhibit 9. In this 2017 FPA, WVURC agreed to perform the work for the project titled “OWCCR Plasma Igniter—Engine Evaluation” (the “**Project**”), which would result in additional developments and potential patent applications and patents that would be exclusively licensed by WVURC to PI under the 2013 License, as amended.

40. As part of the 2017 FPA and consistent with the course of dealing of the parties under the 2013 License Agreement and the 2014 License Amendment, PI agreed that “[a]ll right, title, and interest to all industrial property and intellectual property, including, but not limited to, inventions, improvements, discoveries, patentable materials, copyrightable materials, trademarks, trade secrets, technology, machinery, hardware, software, know-how, methods, data, documents, materials, tests, and all other intellectual or industrial property and improvements thereto, **which are conceived and/or made by one or more employees, agents, contractors, or students of WVU or WVURC in the performance of this Agreement, shall be owned by WVURC.**” *See* Ex. 9, 2017 FPA at Art. VI, § 1 (emphasis added).

41. Further, the 2017 FPA provided that each party would “1. use its best efforts to receive and maintain in confidence any and all confidential or proprietary information delivered by one party ... to the other party; 2. use confidential information solely for the purpose or purposes for which it was disclosed and for no other purpose whatsoever; 3. as a receiving party, to disclose confidential information to its employees, officers, agents, and representatives only on a need to know basis; 4. identify in writing all confidential and proprietary information as such at the time of disclosure; 5. not release confidential or proprietary information to any third parties; and 6. to dispose of or return proprietary or confidential information to the disclosing party when requested or upon expiration or termination of this contract. The period of protection of confidential

information shall be 3 years from the effective date of this contract.” Ex. 9, 2017 FPA, Article VII.

42. During the term and performance of the 2017 FPA, Drs. Smith and Lowery remained in their positions with WVU, as Creators under the WVU IP Policy developing Applicable Intellectual Property that pursuant to the agreements among the parties would then be Technology exclusively licensed to PI.

43. In view of the aforementioned significant patent filings and the misnaming of PI as the applicant on many of these applications, on October 16, 2017, WVURC and PI entered into a License Agreement wherein, in relevant part, the parties acknowledged the 2014 Amendment, stated their desire to rectify the misnaming of PI as the applicant on certain patent applications, and declared their mutual intention to clarify and redefine the rights and ownership of the parties’ intellectual property, license to PI further developments of the Technology by WVU and patents and patent applications relating thereto, and “to reflect WVU as legal owner” of certain patents and patent applications (the “**2017 License**,” attached hereto as Exhibit 10). Further, the 2017 License granted PI “the right, power, and ability to list WVU as the applicant and to act as WVU’s agent for all prosecution decisions. In geographic regions where listing WVU as applicant with PI as agent for WVU is impossible or impracticable ... WVURC [granted] PI permission to apply for patents in PI’s name so long as WVU is recognized and listed as the legal owner of record through assignments or other documentation.” Ex. 10, 2017 License § 3.

44. Pursuant to the 2017 License, WVURC, on behalf of and as licensing agent for WVU, granted PI an exclusive license to commercially exploit the “Licensed Technology” identified in the 2017 License. Ex. 10, 2017 License at 2–3, §§ 1.1, 2; Appx. A).

45. “Licensed Technology” was defined to involve all “invention disclosures, patents, and patent applications identified [in] Appendix A, and all continuing, continuations-in-part, and divisional patent applications....and any other intellectual property rights in the U.S. and around the world relating thereto....[which] may be amended from time to time to include additional invention disclosures and patents/patent applications in the future...Any patent issuing from an application related to any patent or application listed in Appendix A will be deemed automatically added to Appendix A.” Ex. 10, 2017 License at 1, § 1.1.

46. Pursuant to Section 3 of the 2017 License, PI agreed to “amend and/or correct record ownership and/or inventorship of all patents and patent applications identified on Appendix A to reflect WVU as legal owner of such patents and patent applications” within 60 days of execution of the 2017 License. PI was also required to “ensure that assignments assigning rights to all patents and patent applications...are recorded...[with] the United States Patent and Trademark Office.” Ex. 10, 2017 License at 3, § 3.

47. Appendix A of the 2017 License included the following Licensed Technology:

U.S. Patents	U.S. Patent Applications	Foreign Patents/Applications	Invention Disclosures by WVU Docket Number
8,783,220	62/144,019	CN106471243	788
8,887,683	15/311,416	CN106663856	2017-036
9,624,898	15/370,739	EP3129640	2017-035
9,551,315	15/454,418	EP3143662	
9,638,157	14/680,734	JP2017517675	
	15/454,429	JP2017518456	
		KR20160145070	
		KR20170042261	
		MX2016015052	
		PE05952017	
		SG 11201608465 Y	
		SG 11201609604 W	
		WO2011112786	
		W02011127298	
		W02015157294	
		WO2015 176073	

		W02016164603	
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48. Additionally, pursuant to Section 1.1 of the 2017 License, the following patent applications are “Licensed Technology” under the 2017 License because they constitute priority applications, or “continuing, continuations-in-part, divisional patent applications, foreign counterparts, and/or any other intellectual property rights relating thereto” and/or are “patents issuing from an application related to a patent or application listed in Appendix A”:

16/012,709
16/363,357
17/237,211
61/159,004
61/994,332
61/976,843
2016IN-37036414
BR112016023543
CL2016002579
HK17108100.1
HK17111299
MX2016013234
PE2016001951
RU2016143542
2016IN-37041863
BR112016026831
CL2016002927
RU2016149306
EP16777292

49. The patents and patent applications identified in the two preceding paragraphs are collectively identified in the attached Licensed Technology Exhibit (Exhibit 8) and hereinafter referred to as the “**Tranche A Patents and Applications.**” As affirmed in the 2017 License, at all times relevant to this Complaint, WVU has been, and continues to be, the owner of the Tranche A Patents and Applications.

50. Further, the parties contemplated that as additional innovation in the Technology was developed and applications filed thereon, these would be added to the Licensed Technology

in the form of an Amendment to License Agreement as provided in Appendix B to the License Agreement (“**Amendments**”). (2017 License. Ex. 10, 2017 License, § 1.1; Appx. B)

51. The aforementioned pattern of adding WVU Applicable Intellectual Property as developed by Creators affiliated with the University, including improvements and related innovations developed by or with University Resources, to the Licensed Technology exclusively licensed under the license agreements, and the contractual obligations relating to the same in the 2017 License, establishes that WVU would continue to develop the Technology and would own all of the inventions, patent applications and patents relating thereto, and that WVU would not withhold the same from PI, but rather in good faith grant an exclusive license therein to PI under the License Agreement by entering into Amendments from time to time.

52. Further, the parties agreed to maintain the confidentiality of all Confidential Information disclosed by or obtained from the other party in connection with the 2017 License. Section 9 of the 2017 License states that “[t]he confidentiality obligations of the [2013 License], Article 6, is hereby agreed to by the parties hereto and incorporated herein by reference.” Ex. 10, 2017 License § 9.

53. In 2017, Dr. Smith disclosed certain Applicable Intellectual Property to an owner of PI, assuming the same would be maintained as confidential pursuant to the 2017 License Agreement and the general duty of confidentiality imposed upon owners of a company (the information so disclosed shall hereinafter be referenced as the “**Revealed Technology**”). However, following this disclosure Dr. Smith became aware that the owner had disclosed the same information to General Electric, in breach of his obligations of confidentiality.

54. With the third party disclosure without an obligation of confidentiality, the Revealed Technology could only be protected under U.S. patents law if an application therefor was filed with the USPTO within one year of the unauthorized disclosure.

55. WVU and WVURC were unaware of the disclosure of the Revealed Technology to the PI owner, or his subsequent disclosure to General Electric.

56. Following the unauthorized disclosure of the Revealed Technology and unbeknownst to WVU or WVURC, as well as contrary to the procedure set forth in the 2017 License (entering into Amendments to capture further innovation as Licensed Technology), and without any perceived benefit to PI so long as the 2017 License Agreement was in effect, on October 2 and 3, 2017, and later on October 26, 2021, counsel for PI, Wayne Serra, who PI later learned also served as of counsel at McDonnell Boehnen Hulbert & Berhoff LLP (“**MBHB**”), interviewed Dr. Smith regarding his work on the Project and prior research and development at WVU relating to the Technology (including technology emanating from Invention Disclosure 2017-035 and other invention disclosures, the Tranche A Patents and Applications and research and development in furtherance of and related to the Licensed Technology).

57. After the interviews, PI’s Counsel directed MBHB to prepare patent applications for the Revealed Technology, and even named himself as an inventor on five of the applications. The inventions for which PI prepared patent applications are described in the attached Exhibit 11; with the exception of the five applications which identified Mr. Serra as an inventor (which are now abandoned), the applications shall herein be referred to as the “**Tranche B Patent Applications.**”

58. PI filed the Tranche B Patent Applications in December 2017 (with the exception of US 16/517,090, filed July 19, 2019, with priority claimed to Tranche B Patent Application

15/848,005), naming PI as the applicant on each of the applications and filing an assignment reflecting PI as the assignee of each of the Applications. Each of the Tranche B Patent Applications incorporate by reference some of the Tranche A Patents and Applications, incorporate by reference each of the other Tranche B Applications, and much of the disclosures incorporate the same base language.

59. Dr. Smith created, discovered, conceived, researched and/or developed, with University Resources and within the scope of his employment or duties to WVU, his contributions to the Revealed Technology while and in his position as a professor at WVU, including but not limited to during his work on the Project, and in any event prior to September 1, 2017 (the expiration of the 2017 FPA).

60. Thus, pursuant to the WVU IP Policy, WVU retains all equitable rights in innovation contributed by Dr. Smith and described in the Tranche B Applications as Applicable Intellectual Property, and those equitable rights are retained by WVU, regardless of whether Dr. Smith executed an assignment of legal title to WVU.

61. Further and independently, pursuant to the 2017 FPA, WVURC owns all equitable rights “to all...intellectual property...conceived and/or made by” Dr. Smith in connection with the Project. See Ex. 9, 2017 FPA at Art. VI, § 1.

62. Similarly, Dr. Lowery created, discovered, conceived, researched and/or developed, with University Resources and within the scope of his appointment and duties to WVU, his contributions to the Revealed Technology while and in his positions at WVU, including but not limited to during his work on the Project, and in any event prior to September 1, 2017 (the expiration of the 2017 FPA).

63. Thus, pursuant to the WVU IP Policy, WVU retains all equitable rights in innovation contributed by Dr. Lowery and described in the Tranche B Applications as Applicable Intellectual Property, and those equitable rights are retained by WVU, regardless of whether Dr. Lowery executed an assignment of legal title to WVU.

64. Further and independently, pursuant to the 2017 FPA, WVURC owns all equitable rights “to all...intellectual property...conceived and/or made by” Dr. Lowery in connection with the Project. See Ex. 9, 2017 FPA at Art. VI, § 1.

65. It is unclear and unknown what inventions Wayne Serra contributed to the innovations described and claimed in the five patent applications which identify Mr. Serra as an inventor.

66. However, although they executed assignments under the misguided direction of PI’s Counsel, pursuant to the WVU IP Policy neither Dr. Smith nor Dr. Lowery retained any equitable rights in the claimed inventions of the Revealed Technology, and thus were not authorized to convey legal title of the Revealed Technology to PI.

67. As a party to the 2017 License Agreement and the 2017 FPA, PI was well aware that Dr. Smith and Dr. Lowery were not authorized to convey legal title to the Revealed Technology. Further, upon information and belief, PI was familiar with the WVU IP Policy, or at least sufficiently familiar with WVU to know it had a university policy regarding intellectual property which likely required the assignment of all intellectual property rights developed by its professors or using its resources to WVU.

68. Accordingly, PI was aware of WVU and WVURC’s equitable title to the Revealed Technology when Dr. Smith and Dr. Lowery purported to assign legal title to the Revealed Technology to PI.

69. In fact, upon information and belief, in a rush to file the Tranche B Patent Applications, PI Counsel intentionally or inadvertently induced Dr. Smith and Dr. Lowery to breach their obligations of (a) formal disclosure of Applicable Intellectual Property to WVU and (b) confirmatory assignment of legal title to the innovation and patent applications relating thereto to WVU, as provided under the WVU IP Policy.

70. It is not contested that, to the extent the Revealed Technology did not automatically become “Licensed Technology” under the 2017 License, WVU would be obligated to exclusively license the Revealed Technology to PI under the License Agreement, as Licensed Technology, by adding the same per the Appendix B Amendment procedure described in the 2017 License.

71. In addition, the Revealed Technology comprised “Confidential Information” of WVU and the disclosure of such confidential information in the Tranche B Patent Applications without the consent of WVU or WVURC is a breach of the confidentiality obligations under the 2017 License Agreement and the 2017 FPA.

72. Therefore, pursuant to the collective rights and obligations of the various parties under the 2017 FPA, the 2017 License Agreement, and the WVU IP Policy, WVU has at all times retained equitable title to the Tranche B Patent Applications and is the rightful owner of legal title to the Tranche B Patent Applications. Due to PI’s mismanagement and failure to attend to deadlines at the USPTO and in breach of the 2017 License Agreement, most of the Tranche B Patent Applications have been abandoned, including the five applications which name PI’s Counsel as an inventor. The most recent to expire was US Patent Application No. 15/848,311, which was allowed to issue, although the opportunity to pay the issue fee thereon has lapsed (the same may be able to be revived if ownership is corrected by the present action and the relief requested). The last remaining application is US Patent Application No. 16/517,030 which has an

outstanding office action of March 26, 2021, to which a response must be filed by September 26, 2021, with the payment of a three-months extension fee.

73. During its research and development of the Technology, WVU purchased four CPU workstations (the “**Workstations**”). Further, WVU developed a prototype of the Technology for purposes of testing including under the 2017 FPA, and accumulated significant Confidential Information provided in written reports, data, drawings, designs and other memorandum, some of which was stored on the Workstations and other assets. Much of this WVU Confidential Information was in Dr. Lowery’s possession after being removed from WVU facilities.

74. Based upon information and belief, the confidential reports, Workstations, prototypes, and other written materials and personal property embodying or related to the Technology or comprising or including Confidential Information were taken by PI from Dr. Lowery’s possession, and PI maintains possession and control of the same (the “**Confidential Property**”).

75. Over a year after entering into the 2017 License, PI still had not taken any action to correct the ownership of the Tranche A Patents and Applications as agreed to by the parties thereto and still had not disclosed the Revealed Technology or the existence of the Tranche B Patent Applications to WVU or WVURC.

76. The 2017 License Agreement provides that: “[w]hen a party has materially breached this Agreement or materially defaulted in the performance of any of its obligations hereunder, and such material breach or material default has continued for sixty (60) days after written notice thereof was provided to the breaching party by the nonbreaching party, the nonbreaching party may terminate this agreement as to the breaching party. Any termination will

become effective at the end of such 60 day period unless the breaching party has cured or remedied any such breach or default prior to the expiration of such period.” Ex. 10, 2017 License, § 6.2.

77. Therefore, on February 22, 2019, WVURC provided PI with written notice of its material breach of the obligations as defined in the 2017 License, namely its failure to “amend and/or correct record ownership...of all patents and patent applications identified on Appendix A to reflect WVU as legal owner.” (Feb. 22, 2019 Letter from Bruce Sparks, attached as Exhibit 12).

78. Specifically, WVURC identified its awareness of PI’s failure pertaining to at least four material defects:

- a. U.S. Patent No. 9,873,315 did not have an official assignment of record with the USPTO;
- b. U.S. Patent No. 8,887,683 was expired for non-payment of a maintenance fee;
- c. PCT Application US2016/026478; U.S. Application 62/144,019 did not have an official assignment of record;
- d. PCT Application US2016/031451; U.S. Application 15/311,416 did not have an official assignment of record.

79. WVURC expressed its concern that these material defaults put at risk “WVU’s rightful claim to ownership in each patent by not providing legal notice to the public of the assignment” and its concern that “payment of maintenance fees are required to keep in force all utility patents.” Ex. 12.

80. WVURC provided PI with a sixty (60) day cure period following the date of the letter and indicated that if the material defaults continued past that then WVURC “may terminate the License Agreement.” *Id.*

81. On February 23, 2019, PI admitted to the material defects identified by WVURC in its February 22, 2019 letter, stating that WVURC’s concerns regarding the assignments “are correct” and further acknowledged that non-payment of the maintenance fee “is...a problem and is

very disconcerting” to PI. Further, PI acknowledged WVU’s ownership of all intellectual property related to the novel plasma igniter, including the Revealed Technology: “we currently have approximately 40 plasma igniter applications in process and several more to be filed this quarter ... [and] numerous PCT filings which adds to the mix... It will all get corrected as soon as possible.” (Feb. 23, 2019 Letter from PI Managing Member Dr. James Smith, attached as Exhibit 13).

82. In its February 23, 2019 letter, PI agreed to fix the issues within the cure period, but failed to do so.

83. On May 1, 2019, WVURC confirmed termination of the 2017 License for PI’s failure to cure the material defects pointed out in WVURC’s February 22, 2019 letter, effective as of sixty (60) days from its February 22 letter, i.e., April 24, 2019. (May 1, 2019 Letter from Bruce Sparks, attached as Exhibit 14). WVURC also requested that PI forward all “files related to the Licensed Technology” to WVURC’s patent counsel. *Id.*

84. On May 9, 2019, PI again said it believed it could “resolve the issues stated in your letter within two weeks” and it was “willing to put all efforts into resolving the issues stated ASAP.” It also asked if the license can be reinstated. (May 9, 2019 Email from PI Interim Board Member Jill Banner, attached as Exhibit 15).

85. In response to PI’s May 9, 2019 email, WVURC stated that it is “open to negotiating a new license with new terms if PI” is interested.” Ex. 15.

86. On May 14, 2019, PI responded “[w]e are interested” and inquired into the “specific terms” WVU was interested in “incorporate[ing] into a license agreement.” Ex. 15.

87. But then, on May 20, 2019, PI stated that it “maintains that it has not materially breached any term in any of its agreements with WVURC” and “[c]onsequently, WVURC has no

basis for terminating PI's license rights." Further, in this correspondence PI acknowledges that it was only able to obtain cooperation from two of the three WVU inventors in assigning the developed intellectual property, inferring that while it was able to receive cooperation from two WVU inventors, it had no relationship with the WVU inventors sufficient to require them to assign the intellectual property to WVU. (May 20, 2019 Letter from Jill Banner, attached as Exhibit 16).

88. On June 18, 2019, Stephanie Taylor, General Counsel, WVU sent a letter to PI wherein she maintained WVU's position that the former License Agreement between PI and WVURC was terminated effective April 24, 2019. (June 18, 2019 Letter from Stephanie Taylor, attached as Exhibit 17).

89. This June 18, 2019 letter instructed PI to immediately relinquish control of WVU's technology (defined as "Licensed Technology") by returning all pending patent application files, continuing applications, continuations-in-part, divisional applications, foreign counterparts, and any derivatives thereof. *See id.*

90. WVURC did not receive a response to that letter.

91. Having now become aware of the Tranche B Patent Applications and having received no response or action by PI under the demands relating to the terminated License Agreement, on January 7, 2021, Ms. Taylor sent a follow up letter to PI, attached hereto as Exhibit 18, in which Ms. Taylor demanded that (1) "PI immediately cease and desist from making any representation that PI owns, has rights or access to, or a valid license to [the Licensed Technology]"; (2) "PI return[] all information, records, documents (including but not limited to notes and reports in both paper and electronic form), data, and materials, including prototypes and samples, (collectively "Assets") relating to previously [Licensed Technology]"; and (3) pursuant

to the 2017 License, “assign[] and ensure[] the assignment of all [Licensed Technology], specifically including but not limited to the following patents and patent applications:

- e. U.S. Application 16/517,090;
- f. U.S. Application 15/848,311;
- g. U.S. Application 15/848,539;
- h. U.S. Application 15/848,024;
- i. U.S. Patent No. 9,873,315;
- j. PCT Application US2016/026478 and national applications/patents claiming priority to the PCT;
- k. PCT Application US2016/031451 and national applications/patents claiming priority to the PCT; and
- l. PCT Application US2015/024727 and national applications/patents claiming priority to the PCT

92. The failure of PI to timely return those files and correct assignments related to WVU’s intellectual property continues to harm WVU’s and WVURC’s business interests, including its ability to prosecute the pending applications and otherwise manage the patent portfolio and evidence clear title thereto, resulting in financial losses to WVURC and WVU.

93. On January 19, 2021, PI filed for Chapter 7 bankruptcy in the Northern District of Ohio, Case No. 21-10171-jps (the “**Bankruptcy Action**”).

94. In connection with the Bankruptcy Action, PI submitted an inventory listing of its personal property dated February 1, 2021, attached hereto as Exhibit 19. Among the items listed, PI included WVU’s Workstations and a tablet, although WVU and WVURC believe that PI possessed other Confidential Property of WVU, including multiple prototypes (the “**Prototypes**”) of various embodiments of the Technology.

95. Upon information and belief, the Confidential Property embodies and/or contains Confidential Information and Technology owned by WVURC pursuant to the 2017 FPA, the 2017 License and the afore-referenced predecessor agreement, as amended.

96. Additionally, PI submitted an inventory listing of its intellectual property in the Bankruptcy Action, attached hereto as Exhibit 20. Among the items listed were most of the Tranche A Patents and Applications and the Tranche B Patent Applications.

97. Pursuant to authority and direction of the Bankruptcy Trustee, WVU retained counsel for the bankruptcy estate to avoid abandonment of the last two active Tranche B Patent applications (namely, US 15/848,311 and US 16/517,090) with the USPTO by attending to filing responses to office actions, and payment of extension fees, incurring Five Thousand Seven Hundred Ninety Eight Dollars (\$5,798.00) in USPTO and legal fees (the “**Legal Expenses**”).

98. On June 9, 2021, WVURC filed a proof of claim in the Bankruptcy Action for breach of contract and conversion, attached hereto as Exhibit 21. In its rider to proof of claim, WVURC claimed ownership interests in the Confidential Property and the Tranche A Patents and Applications and the Tranche B Patent Applications.

99. On July 6, 2021, the Bankruptcy Case was dismissed as a no-assets case, and as a result the Legal Expenses were not reimbursed to WVU. The Bankruptcy Court did not resolve the WVURC claim.

100. The 2017 FPA provides that PI “consents to personal jurisdiction within the State of West Virginia for any legal action necessary to enforce any provision of this Agreement.” Ex. 9, 2017 FPA § 9.

101. The 2017 License Agreement provides that:

Any and all disputes arising [under the Agreement] will be litigated, if at all, in either the Federal or State courts in the State of West Virginia, it being the intention of the parties that the State of West Virginia will serve as the exclusive forum for dispute resolution. The parties submit to the jurisdiction of the courts of the State of West Virginia, and agree that, in the event an action is brought in the State of West Virginia, they will waive any argument of lack of

personal jurisdiction or improper venue, which they might otherwise have.

Ex. 10, 2017 License, § 10.

COUNT I
Declaratory Judgment

102. WVU and WVURC incorporate the allegations contained in the preceding paragraphs as if fully set forth herein.

103. In their inventions as described and claimed in the Tranche A Patents and Applications, Inventors Jim Smith, Franz Pertl, Michael Spencer and Andrew Lowery were all “Creators” under the WVU IP Policy, and the inventions described in the patents and applications were all “Applicable Intellectual Property” as defined in the WVU IP Policy, and therefore pursuant to the policy all equitable rights in the inventions so described and claimed were retained by WVU.

104. Thus, WVU has always been and is the rightful owner of legal title to the Tranche A Patents and Applications.

105. Pursuant to Section 3 of the 2017 License, PI agreed to “amend and/or correct record ownership and/or inventorship of all patents and patent applications identified on Appendix A to reflect WVU as legal owner of such patents and patent applications” and to “ensure that assignments assigning rights to all patents and patent applications...are recorded...[with] the United States Patent and Trademark Office.” Ex. 10, 2017 License at 3, § 3.

106. Nonetheless, PI failed to assign and/or ensure the recording of the assignment of the Tranche A Patents and Applications.

107. In their inventions as described and claimed in the Tranche B Applications, Inventors Jim Smith and Andrew Lowery were both “Creators” under the WVU IP Policy, and the inventions described in the patents and applications as contributed by Drs. Smith and Lowery were

all “Applicable Intellectual Property” as defined in the WVU IP Policy, and therefore pursuant to the policy all equitable rights in the inventions so described and claimed were retained by WVU and constituted “Confidential Information” of WVU.

108. Therefore, WVU has always been and is the rightful owner of legal title to the Tranche B Applications.

109. As WVU retained all equitable right, title and interest in Applicable Intellectual Property, neither Jim Smith nor Andrew Lowery were authorized to assign legal title to the inventions to PI.

110. Further, pursuant to each of the 2017 FPA and the 2017 License and the course of dealing of the parties under the 2017 License and its predecessor agreements, WVU is, and since the conception of the inventions therein disclosed, the preparation of the applications and the filing of the same, has been the rightful owner of legal title to the Tranche B Applications.

111. In addition, PI abandoned a number of patent applications, including US 15/370,739, 16/012,709, and almost all of the Tranche B Applications (the status of non-US applications is in many cases unknown until WVU is named applicant), and allowed at least the following patent to expire for non-payment of maintenance fees: US 8,887,683 (collectively, the **“Abandoned Patents and Applications”**).

112. PI’s failure to assign and/or ensure the recording of proper ownership of the Tranche A Patents and Applications and its abandonment of the Abandoned Patents and Applications each constituted a material breach of the 2017 License, which after due and proper notice PI failed to timely cure.

113. Likewise, PI’s failure to assign and/or ensure the recording of proper ownership of the Tranche B Applications constituted a material breach of the 2017 License.

114. As of the filing of this Complaint, some of the Tranche A Patents and Applications are not properly registered as owned by WVU. Further, as evidenced in the Bankruptcy filings and upon information and belief, PI continues to assert that it is the owner of the Tranche B Patent Applications.

115. As PI has failed to comply with its contractual obligations with WVU and WVURC by correcting the named applicant and/or providing assignments of the Tranche A Patents and Applications, an actual and justiciable controversy exists regarding the ownership of the Tranche A Patents and Applications.

116. As PI listed the 2017 License as an asset of the bankruptcy estate and seemingly currently refuses to acknowledge the termination thereof, an actual and justiciable controversy exists as to whether the 2017 License has terminated.

117. Further, as PI has not relinquished its claim of legal title to the Tranche B Applications to WVU, an actual and justiciable controversy exists regarding the ownership of the Tranche B Applications, and similarly an actual and justiciable controversy exists as to the validity of the assignments of the Tranche B Applications to PI.

118. WVU and WVURC desire a judicial determination and declaration of the ownership of the Tranche A Patents and Applications pursuant to the 2017 License. Such a declaration is necessary and appropriate at this time so the parties may ascertain their respective rights and duties regarding the Tranche A Patents and Applications, and so that WVURC may prosecute and maintain the various patent applications and patents at the respective patent offices throughout the world.

119. WVU and WVURC desire a judicial determination and declaration of the ownership of the Tranche B Applications, pursuant to each of the WVU IP Policy, the 2017

License, the 2017 FPA, and the course of dealing among the parties, and further a judicial determination as to the invalidity and unenforceability of the assignment of the Tranche B Applications by WVU inventors, namely Dr. Smith and Dr. Lowery, to PI.

120. Further, WVU and WVURC desire a judicial determination and declaration that the 2017 License is terminated. Such a declaration is necessary and appropriate at this time so the parties may ascertain their respective rights and duties regarding the 2017 License.

121. Therefore, pursuant to Federal Rule of Civil Procedure 57 and 28 U.S.C. § 2201, WVU and WVURC are entitled to a judgment declaring that (1) WVU has been, and continues to be, the sole and exclusive owner of the Tranche A Patents and Applications, (2) That PI's legal title to the Tranche B Applications is defective, and WVU has been, and continues to be, the sole and exclusive legal owner of the Tranche B Applications, and (3) the 2017 License is terminated.

COUNT II
Breach of Contract

122. WVU and WVURC incorporate the allegations contained in the preceding paragraphs as if fully set forth herein.

123. As outlined in Count I, PI materially breached the 2017 License when it failed to assign and/or ensure the recording of the Tranche A Patents and Applications and when it abandoned the Abandoned Patents and Applications.

124. Following PI's breach, WVU demanded that PI (1) "immediately cease and desist from making any representation that PI owns, has rights or access to, or a valid license to [the Licensed Technology;]" and (2) "return[] all information, records, documents (including but not limited to notes and reports in both paper and electronic form), data, and materials, including prototypes and samples, (collectively "Assets") relating to previously [Licensed Technology,]" among other demands. Ex. 18, January 7, 2021 Letter from Stephanie Taylor.

125. PI never responded to WVU's demands.

126. Further, in connection with the Bankruptcy Action, PI identified the Tranche A Patents and Applications and Tranche B Applications as intellectual property owned or licensed by PI, and identified some of the Confidential Property as personal property owned by PI. See Ex. 20, Inventory of Intellectual Property; Ex. 19, Inventory of Personal Property Dated Feb. 1, 2021.

127. Upon information and belief, the Confidential Property contains Confidential Information owned by WVURC and/or WVU pursuant to the 2017 License and the 2017 FPA.

128. Pursuant to Section 9 of the 2017 License, which incorporated by reference the confidentiality obligations of the 2013 License, see Ex. 10, 2017 License § 9, PI agreed that "all embodiments and expressions of...Confidential Information...shall be and remain the property of the disclosing party at all times, and shall be returned to the disclosing party upon request." Ex. 3, 2013 License § 6.3. Likewise, PI agreed to keep "all Confidential Information in strictest confidence" and not to "directly or indirectly disclose any Confidential Information, other than to employees or agents...who reasonably require knowledge of such Confidential Information to accomplish the disclosure of the Confidential Information." Ex. 3, 2013 License § 6.2.

129. Likewise, pursuant to Article VII of the 2017 FPA, the parties thereto agreed to maintain the other party's confidential information in confidence, and return the same to the disclosing party upon request or expiration of the FPA.

130. Nonetheless, as of the filing of this Complaint, PI has failed to return the Confidential Property to WVU. Further, PI filed the Tranche B Applications without knowledge or consent from WVU or WVURC, which filing further constituted a breach of PI's confidentiality obligations under the 2017 License and the 2017 FPA.

131. PI's failure to return the Confidential Information constitutes a breach of the 2017 License and the 2017 FPA.

132. PI's disclosure of the Revealed Technology to General Electric constitutes a breach of the 2017 License and the 2017 FPA.

133. PI's filing of the Tranche B Applications further constitutes a breach of the 2017 License and the 2017 FPA.

134. Further, upon information and belief, PI is using and/or disclosing WVU's Confidential Information.

135. PI's use and disclosure of WVU's Confidential Information constitutes a breach of the 2017 License and the 2017 FPA.

136. PI's breaches have caused, or threaten to cause, substantial and irreparable damage to WVU and WVURC by preventing WVU and WVURC from enjoying the full benefits of their intellectual property rights.

137. At this time, WVU and WVURC cannot, without difficulty, ascertain the exact amount of damages suffered from PI's breaches, and WVU and WVURC have no adequate remedy to redress the damage that has been done and will continue to be done if the breaches are not remedied.

138. Unless PI is required to remedy its breaches, WVU and WVURC will suffer substantial and irreparable harm.

139. Accordingly, WVU and WVURC request an order requiring that PI specifically perform under the 2017 License, in the form of an order outlining that PI: (1) is prohibited from using or disclosing WVU's and WVURC's Confidential Information; (2) is prohibited from asserting that it owns, has rights or access to, or a valid license to the Tranche A Patents and

Applications or the Tranche B Applications; and (3) must return all originals and/or copies of Confidential Information owned by WVURC to WVURC all copies of such Confidential Information in PI's possession, including but not limited to the Prototypes, the Work Stations, and the tablets.

140. Additionally, as a direct and proximate result of PI's breaches of the 2017 License, the 2017 FPA, and related breaches, and in particular as a result of the Abandoned Patents and Applications, WVU and WVURC have suffered substantial damages in an amount to be proven at trial.

REQUEST FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that this Court:

1. Enter judgment in favor of WVU and WVURC on all counts in this Complaint;
2. Declare that WVU has been, and continues to be, the legal owner of the Tranche A Patents and Applications;
3. Declare that PI's legal title to the Tranche B Applications is defective and WVU has been, and continues to be, the legal owner of the Tranche B Applications;
4. Declare and confirm that the 2017 License is terminated;
5. Order PI to specifically perform under the 2017 License, in the form of an order outlining that PI:
 - a. is prohibited from using or disclosing WVURC's Confidential Information;
 - b. is prohibited from asserting that it owns, has rights or access to, or a valid license to the Tranche A Patents and Applications and the Tranche B Applications; and
 - c. must return all originals and/or copies of Confidential Information owned by WVURC to WVURC in PI's possession, including but not limited to the Prototypes and the Workstations, and all Confidential Information contained in the Confidential Property;

6. Order PI to make a confirmatory assignment of all Tranche A Patents and Applications, and to any infringement claims arising therefrom to WVU;

7. Order PI to execute a confirmatory assignment of legal title to the Tranche B Applications, and to any infringement claims arising therefrom to WVU;

8. Award damages for PI's breach of the 2017 License and the 2017 FPA in an amount to be proven at trial; and

9. Award reimbursement for the Legal Expenses incurred in preserving the Pending Applications.

JURY DEMAND

Plaintiffs demand a trial by jury on all issues so triable.

Dated: August 23, 2021

Respectfully submitted,

/s/ Edward J. George

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